ABSTRACT

A method for implementing the invention is carried out in a data-storage system having a data storage unit that includes at least two constituent data storage elements. Each of the constituent data storage elements is either in a first state or a second state. The method includes providing a data structure having an entry corresponding to the data storage unit. The entry includes status information indicating whether at least one constituent data storage element of the data storage unit is in the first state. These entries are updated as necessary following any changes in state of the constituent data storage element. Scanning the data storage units instead of the data storage elements provides a more efficient way to locate data storage elements in the first state, particularly where such data storage elements are rare.